## FLOV-3D° CAST

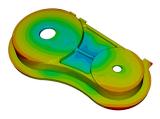
### GRAVITY DIE CASTING

The Next Generation of Casting Simulation Software

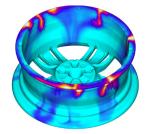
### **GENERAL FEATURES**

- The most accurate filling simulation tool, based on the TruVOF and FAVOR™ algorithms
- · Advanced solidification model
- · Intuitive model setup
- · Automatic grid generation
- · Event based simulation control
- · Moving geometries (ladle, stopper)
- · Stress analysis with distortion
- Physical models including turbulence and surface tension
- · Comprehensive defect prediction
- Output of important process variables (velocity, temperature, pressure)
- Additional outputs (flow path and distance, contact times)
- Extensive analysis tools (probes, sampling volumes, tracers)
- · Advanced particle model
- · Complete simulation suite
- · Floating license

Temperature



**Thermal Stresses** 



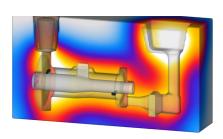
Oxides



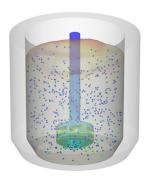
Solid Fraction

### ADVANCED DEFECT PREDICTION

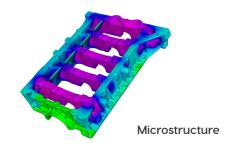
- · Oxide formation and transportation
- · Entrained air, void particles
- · Liquid regions, hot spots
- · Cold run, unfilled cavities
- · Shrink holes, porosities
- · Distortion, hot cracks



**Mold Temperature** 



Melt Processing



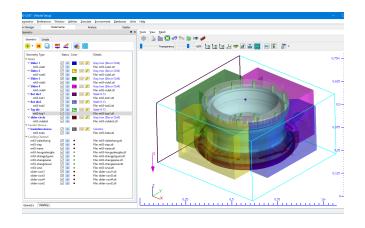
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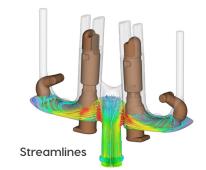
### **USER INTERFACE**

- Process-oriented workspaces
- Comprehensive databases for metals, solids, and HPDC machines
- · Interactive object creation
- · Project management
- · Queueing system
- · Configurable simulation monitor

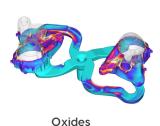


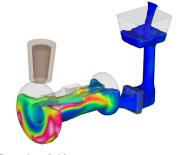
### FLOW-3D POST

- · Multi-case analysis
- · Defect prediction tools
- · Multiple objects and viewports
- · Particles, vectors, and streamlines
- · Volume rendering
- · Customizable analysis tools
- · Keyframe animations











Entrained Air

#### **GLOBAL DISTRIBUTION NETWORK**

#### **HEADQUARTERS**

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